

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>15468-7PCT</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/CA 03/01899</b>	International filing date (day/month/year) <b>04/12/2003</b>	(Earliest) Priority Date (day/month/year) <b>04/12/2002</b>
Applicant <b>TECHNOLOGIES BIOLACTIS INC.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  **Certain claims were found unsearchable (See Box I).**

3.  **Unity of invention is lacking (see Box II).**

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

None of the figures.

# INTERNATIONAL SEARCH REPORT

International Application No

PA/CA 03/01899

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 A61K9/107 A61K47/36 A61K31/337 A61K31/425 A61K31/715  
A61P35/00 A61K31/00 A61K39/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	<p>‘Online! XP002280832          Retrieved from the Internet:          URL:<a href="http://www.roemp.com/thieme-chemistry/roemp/prod/index1.html">http://www.roemp.com/thieme-chemistry/roemp/prod/index1.html</a>&gt;          ‘retrieved on 2004-05-14!          the whole document          Paragraph 2 on page 1: Use of          exopolysaccharide as immunostimulan or          drug carrier          Table</p> <p>-----</p> <p style="text-align: center;">-/-</p>	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

24 May 2004

Date of mailing of the international search report

14/06/2004

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/CA 03/01899

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X, Y	WO 03/053158 A (DUPONT CLAUDE ; PAQUET MARCEL (CA); SIMARD ERIC (CA); LAJOIE NATHALIE) 3 July 2003 (2003-07-03) the whole document page 4, paragraph 2 - page 6, paragraph 2 pages 18-19 page 30, paragraph 2 - page 32, paragraph 1 claims 1,12,27,58; examples 1,6,9,19-22,26,33,37 -----	1-39
X, Y	BURNHAM N L: "POLYMERS FOR DELIVERING PEPTIDES AND PROTEINS" AMERICAN JOURNAL OF HOSPITAL PHARMACY, AMERICAN SOCIETY OF HOSPITAL PHARMACISTS, BETHESDA, MD, US, vol. 51, no. 2, 15 January 1994 (1994-01-15), pages 210-218, XP000783643 ISSN: 0002-9289 the whole document abstract page 216, column 2, paragraph 3-6 -----	1-39
X, Y	US 2002/131995 A1 (SZOKA FRANCIS C) 19 September 2002 (2002-09-19) the whole document paragraphs '0010!, '0025!; claims 1,12,13,22 -----	1-39
X, Y	WO 00/41730 A (BROWN TRACEY ; MEDITECH RES LTD (AU)) 20 July 2000 (2000-07-20) the whole document page 3, lines 12-32 page 4, lines 8-13 page 5, lines 13-37 examples 2-8,12 page 75, lines 3-20 page 77, line 5 - page 82, line 17; claims 1-12 -----	1-39
X, Y	WO 99/02151 A (ASCULAI SAMUEL S ; HYAL PHARMA CORP (CA); MOORE ADRIAN (GB)) 21 January 1999 (1999-01-21) the whole document pages 1-3 page 7, lines 15-22 page 8, lines 20-25 claims 1-10 -----	1-39
X, Y	US 6 140 312 A (FALK RUDOLF EDGER ET AL) 31 October 2000 (2000-10-31) the whole document claims; example 7 -----	1-39
		-/-

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB03/01899

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, Y	US 6 350 458 B1 (MODI PANKAJ) 26 February 2002 (2002-02-26) the whole document column 1, lines 15-22 column 4, lines 25-27 column 7, lines 13-25 column 10, lines 15-19 column 10, lines 45-47, 58-60 column 13, lines 15-18, 39, 64 column 14, lines 5, 58-65 column 15, lines 4-18; claim 1; examples 2-4 -----	1-39
X, Y	NA KUN ET AL: "Self-assembled hydrogel nanoparticles responsive to tumor extracellular pH from pullulan derivative/sulfonamide conjugate: Characterization, aggregation, and adriamycin release in vitro" PHARMACEUTICAL RESEARCH (NEW YORK), vol. 19, no. 5, May 2002 (2002-05), pages 681-688, XP009031095 ISSN: 0724-8741 the whole document abstract -----	1-39
X, Y	AMORENA B ET AL: "Use of liposome-immunopotentiated exopolysaccharide as a component of an ovine mastitis staphylococcal vaccine." VACCINE. 1994, vol. 12, no. 3, 1994, pages 243-249, XP002281061 ISSN: 0264-410X the whole document abstract -----	1-39
X, Y	US 4 578 458 A (PIER GERALD B) 25 March 1986 (1986-03-25) the whole document column 1, lines 14-19 column 1, line 54 - column 2, line 22 -----	1-39
X, Y	FR 2 631 829 A (PASTEUR INSTITUT) 1 December 1989 (1989-12-01) the whole document page 1, lines 3-5 -----	30-39

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA 03/01899

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  

Although claims 31-38 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/CA 03/01899

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 03053158	A	03-07-2003	WO	03053158 A2		03-07-2003
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US 6140312	A	31-10-2000	CA AP AT AU AU WO CN CZ DE DE DK EP ES FI GR HK HU HU IN IN IN IN IN JP MD MX NO NZ NZ PL PT RO SG SK US US US	2061703 A1 475 A 200736 T 3488893 A 4273297 A 9316732 A1 1084064 A , B 9300230 A3 69330180 D1 69330180 T2 626863 T3 0626863 A1 2156124 T3 943789 A 3036164 T3 1005983 A1 75089 A2 9500652 A3 175918 A1 182267 A1 182348 A1 179130 A1 178280 A1 7506812 T 960307 A 9300904 A1 943044 A 249071 A 299280 A 173211 B1 626863 T 117499 B 52416 A1 11193 A3 5990096 A 6136793 A 5942498 A		21-08-1993 08-03-1996 15-05-2001 13-09-1993 15-01-1998 02-09-1993 23-03-1994 12-06-2002 31-05-2001 29-11-2001 30-07-2001 07-12-1994 16-06-2001 03-10-1994 31-10-2001 17-08-2001 28-04-1997 30-10-1995 28-10-1995 27-02-1999 27-03-1999 30-08-1997 22-03-1997 27-07-1995 31-10-1997 01-10-1993 19-10-1994 29-01-1997 22-12-2000 27-02-1998 30-08-2001 30-04-2002 28-09-1998 09-09-1993 23-11-1999 24-10-2000 24-08-1999

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/CA 03/01899

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 6140312	A		US 6218373 B1 US 6147059 A US 6087344 A	17-04-2001 14-11-2000 11-07-2000
US 6350458	B1	26-02-2002	US 6221378 B1 US 6231882 B1 US 6017545 A AU 763251 B2 AU 6814300 A WO 0115666 A1 CA 2382535 A1 EP 1207853 A1 JP 2003508421 T NZ 517313 A AU 750197 B2 AU 2505399 A WO 9940932 A1 EP 1053011 A1 JP 2003522096 T NZ 506024 A US 2003171259 A1 BR 9804295 A	24-04-2001 15-05-2001 25-01-2000 17-07-2003 26-03-2001 08-03-2001 08-03-2001 29-05-2002 04-03-2003 30-05-2003 11-07-2002 30-08-1999 19-08-1999 22-11-2000 22-07-2003 01-02-2002 11-09-2003 28-03-2000
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FR 2631829	A	01-12-1989	FR 2631829 A1 WO 8912106 A1	01-12-1989 14-12-1989